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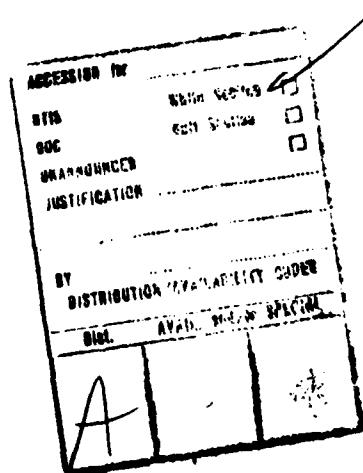
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This report contains a bibliographic listing of technical publications and papers presented by personnel of the US Army Natick Research & Development Command and its contractors for the period October 1977 through September 1978.		

PREFACE

This bibliography is a list of technical publications and papers by personnel of the US Army Natick Research and Development Command and its contractors for the period October 1977 through September 1978. The arrangement is by organizational elements. In most instances where an article was prepared jointly by personnel of more than one laboratory, the citation is listed fully under the laboratory of the senior author with a "see" reference under the laboratory of the junior authors.

Reprints of journal articles, in some cases, are available from the individual authors. Copies of technical reports may be obtained from (1) The Defense Documentation Center, Cameron Station, Alexandria, Virginia 22314, or (2) the National Technical Information Service, Springfield, Virginia 22161. The "AD" number should be cited when ordering copies of reports. Those reports marked with an asterisk (*) are not available for distribution outside the agencies of the US Government. Technical papers refer to presentations for which no printed copies exist.

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US ARMY NATICK RESEARCH AND DEVELOPMENT COMMAND

OFFICE OF THE COMMANDER

Journal Articles

1. PENNEY, H. F. Accomplishments and current programs at U.S. Army Natick Research and Development Command. Activities Report of the R & D Associates, 30(2): 1-4 (1978).

Technical Papers

2. PENNEY, H. F. Welcome remarks. Research and Development Associates for Military Food and Packaging Systems, Inc., US Army Natick Research and Development Command, Natick, MA, 4 October 1977.
3. _____ Accomplishments and current programs at US Army Natick Research and Development Command. Research and Development Associates for Military Food and Packaging Systems, Inc., Chicago, IL, 11 April 1978.

DEPUTY COMMANDER

Technical Papers

4. DIXON, B. D. The US Army Natick Research and Development Command - making things better. Retired Officers Association, Coast Guard Support Center, Boston, MA, 19 January 1978.
5. _____ Introduction of new equipment. US Army Quartermaster Officer Advanced Class 77-3, US Army Quartermaster School, Fort Lee, VA, 26 January 1978.
6. _____ Introduction of new equipment. US Army Quartermaster Officer Advanced Class 78-1, US Army Quartermaster School, Fort Lee, VA, 8 May 1978.
7. _____ The US Army Natick Research and Development Command - making things better. West Point Association, US Army Natick Research and Development Command, Natick, MA, 30 May 1978.
8. _____ The US Army Natick Research and Development Command - making things better. Rotary Club, Framingham, MA 18 September 1978.
9. _____ The US Army Natick Research and Development Command - making things better. Labor Relations Council, South Middlesex Chamber of Commerce, Framingham, MA, 20 September 1978.

DOD JOINT TECHNICAL STAFF

Journal Articles

10. HELMUTH, R. A. Navy food service training study. Navy Supply Corps Newsletter, 41(2): 10 (1978).

Other Publications

11. HEIDELBAUGH, N. D. Space food systems. In Encyclopedia of Food Science. M. S. Peterson and A. H. Johnson (eds). Avi Publishing Co., Westport, CT, 1978, pp. 700-702.

OFFICE OF TECHNICAL DIRECTOR

Technical Papers

12. ANDERSON, E. E., and J. L. KENYON. Highlights of the DOD Food RDT & Eng Program, US Army TECOM, Aberdeen Proving Grounds, MD, 17 February 1978.
13. _____ Updating the DOD Food R&D Program. Lake Erie Section, Institute of Food Technologists, Cleveland, OH, 14 March 1978.
14. _____ The Senate's 1978 dietary goals and you. Hancock Church, Lexington, MA, 2 May 1978.

Other Publications

15. ANDERSON, E. E. United States: Part 1. Armed forces. In Encyclopedia of Food Science. M. S. Peterson and A. H. Johnson (eds.). Avi Publishing Company, Westport, CT, 1978, pp. 973-976.

ENGINEERING PROGRAMS MANAGEMENT OFFICE

Journal Articles

16. LEVELL, E. F. Specifications - guilty or not. Activities Report of the R & D Associates, 30(2): 97-99 (1978).

Technical Papers

17. LEVELL, E. F. Specifications - guilty or not. R&D Associates Meeting, Chicago, IL, 11 April 1978.
18. SHIMKUS, D. F. NARADCOM's Value Engineering Program. DARCOM VE Program Managers, DARCOM VEPM Conference, Indianapolis, IN, 11 May 1978.
19. TUMEINSKI, R. F. Quality Assurance Activities at NARADCOM. Quality and Reliability Interns, US Army Management Engineering Training Activity, Rock Island, IL, 7 September 1978.

OPERATIONS RESEARCH AND SYSTEMS ANALYSIS OFFICE

Technical Reports

20. BYRNE, R. J. A proposed concept of a modern food service system for Army combat forces in the 1990's. NATICK/TR-78/025, May 1978.
21. HERZ, M. L., R. BOURASSA, H. KIREJCZYK, and M. A. JENDZEJEC. Analysis of alternative patient tray delivery concepts. NATICK/TR-78/013, September 1977.
22. _____, A. FREEMAN, G. ECCLESTON, G. HERTWECK, S. BARITZ, P. SHORT, W. O. VENEKLASEN, and J. SOUDER. A systems analysis of alternative food service concepts for new Army hospitals. NATICK/TR-78/031, March 1978.

Technical Papers

23. BYRNE, R. J. Natick customer opinions: What did opinion polls discover about sailors' desires about food services on air craft carriers. Fleet Habitability and Personnel Services Symposium, San Diego, CA, 3-7 April 1978.
24. _____ New initiatives in food service systems analysis. National Research Council, Advisory Board on Military Personnel Supplies, Committee on Food Service Systems, Mayport, FL, 19 June 1978.
25. HERTWECK, G. Analyzing food production equipment requirements. Food Service Systems 78, Los Angeles, CA, 18-20 April 1978.
26. _____ Alternative food service concepts for new Army hospital. National Research Council, Advisory Board on Military Personnel Supplies, Committee on Food Service Systems, Mayport, FL, 19 June 1978.
27. _____ A new food service concept for the Marine Corps. National Research Council, Advisory Board on Military Personnel Supplies, Committee on Food Service Systems, Mayport, FL, 19 June 1978.

OPERATIONS RESEARCH AND SYSTEMS ANALYSIS OFFICE

Technical Papers (continued)

28. HERTWECK, G. Natick Research and Development Command: An overview. Academy of Health Sciences, Hospital Food Service Branch, Health Care Administrative Division, United States Army, Ft. Sam Houston, TX, 24-28 July 1978.
29. HERZ, M. A systems analysis of alternative food service concepts for new hospitals. Academy of Health Sciences, Hospital Food Service Branch, Health Care Administrative Division, United States Army, Ft. Sam Houston, TX, 24-28 July 1978.
30. KIREJCZYK, H. An evaluation of hospital field feeding systems. Academy of Health Sciences, Hospital Food Service Branch, Health Care Administrative Division, United States Army, Ft. Sam Houston, TX, 24-28 July 1978.
31. RICHARDSON, R. P. Food service systems analysis afloat program. National Research Council, Advisory Board on Military Personnel Supplies, Committee on Food Service Systems, Mayport, FL, 19 June 1978.
32. NARADCOM's view of the USS Saratoga test project.
Dedication Ceremony, New Food Service System on USS Saratoga; Naval Air Force, US Atlantic Fleet, Mayport, FL, 13 September 1978.

Other Publications

33. BYRNE, R. J. Systems analysis - a food service application. In Encyclopedia of Food Science. M. S. Peterson and A. H. Johnson (eds). Avi Publishing Company, Westport, CT, 1978, pp. 725-731.

TECHNICAL DOCUMENTATION OFFICE

Technical Reports

34. Bibliography of technical publications and papers: July 1976-September 1977. US Army Natick Research and Development Command. NATICK/TR-78/001, October 1977.

AERO-MECHANICAL ENGINEERING LABORATORY

Technical Reports

35. JOHNSON, A. R. Comparative evaluation of concepts for modular tentage. Natick/TR-78/009, January 1978. (AD A055 347).
36. PAYNE, P. R. Development of an ultra high level airdrop container concept. Payne, Inc., Contract No. DAAK03-74-C-0197. Natick/TR-77/030, September 1977 (AD A046 156).
37. SHOPALOVICH, P., and F. BARCA. Accordion shelter hardware analysis. Natick/TR-78/011, February 1978 (AD A053 592).
38. STEEVES, E. C. Effect of nonuniform yarn lengths on the strength of pressurized fabric tubes. Natick/TR-77/010, May 1977.

Journal Articles

39. JOHNSON, A. Scaling and the pre-asymptotic behavoir of the condition of high order finite element stiffness matrices. Computers and Structures, 9(1): 97-100 (1978).

Technical Papers

40. FALABELLA, G., JR. Army airdrop R&D program. Aerial Delivery Coordination Office, Ft. Bragg, NC, 6 September 1978.

CLOTHING, EQUIPMENT AND MATERIALS ENGINEERING LABORATORY

Technical Reports

41. BENSEL, C. K., L. P. BRYAN, and S. A. MELLIAN. The psychomotor performance of women in cold weather clothing. Natick/TR-77/031, (CEMEL-181), October 1977.
42. CHURCHILL, T., E. CHURCHILL, J. T. MCCONVILLE, and R. M. WHITE. Anthropometry of women of the US Army-1977. Report No. 3 - Bivariate frequency tables. Webb Associates, Inc., Contract No. DAAG17-76-C-0010. Natick/TR-77/028, (CE&MEL-174), July 1977 (AD A046 692).
43. GARDELLA, J. W., and V. K. DEVARAKONDA. Laboratory evaluation of narrow fabrics woven on shuttleless looms. Natick/TR-78/030, October 1978.
44. GAYNOR, J. C. Automated production of insulated footwear. Uniroyal, Inc., Contract No. DAAG17-76-0016. Natick/TR-78/004, (CEMEL-182), June 1977.
45. MCCONVILLE, J. T., E. CHURCHILL, T. CHURCHILL, and R. M. WHITE. Anthropometry of women of the US Army-1977. Report No. 5 - Comparative data for US Army men. Webb Associates, Inc., Contract No. DAAG17-76-C-0010. Natick/TR-77/029, (CE&MEL-176), July 1977 (AD A048 591).
46. WHITE, R. M. A bibliography of US Army anthropology (1947-1977). Natick/TR-78/012, (CE&MEL-170), December 1977.
47. WILSON, A. Rubber, its history and applications. Natick/TR-78/019, (CEMEL-183), April 1978.

Journal Articles

48. GROJEAN, R. E., J. A. SOUSA, J. F. ROACH, E. F. WYNER, and M. NAKASHIMA. Remote pollution probing by laser-induced luminescence techniques. Optical Engineering, 17(2): 139-142 (1978).
49. WILSON, A. Fire resistance of phosphazene rubber coated fabrics. Journal of Coated Fabrics, 7(3): 233-239 (1978).

CLOTHING, EQUIPMENT AND MATERIALS ENGINEERING LABORATORY

Technical Papers

50. BARRON, E. R. Functional clothing, design and development of body armor, fit, construction and development of the load profile analyzer as a research tool for more effective design of functional clothing. University of Houston, Houston, TX, October 1977.
51. _____ Creative designing - development of load profile analyzer - design of body armor. Cornell University, Dept. of Design and Environmental Analysis, Ithaca, NY, 25-26 October 1977.
52. _____ Creative design, development of body armor and application of load profile analyzer; factors influencing the comfort and acceptability of functional clothing. University of Houston, Houston, TX, 17-18 April 1978.
53. _____ Fit, comfort, sizing, construction of light-weight soft body armor. Body Armor and Ammunition Workshops Series, International Associations of Chiefs of Police, Los Angeles, CA, 23-24 January 1978; Atlanta, GA, 21 February 1978; Chicago, IL, 29 March 1978; Seattle, WA, 5-6 June 1978.
54. DESANTIS, G. New infantry helmet and vest program. 1977 Annual Meeting, Small Arms Systems Division, Marine Corps Development & Education Command, Quantico, VA, 26-27 October 1977.
55. FELDMAN, D. Review of Army flashblindness requirements. Tri-Service Group on Flashblindness Protection, Kelly Air Force Base, TX, 16 October 1977.
56. _____ Laser protective spectacles. Defense Personnel Supply Center, Philadelphia, PA, 17 November 1977.

CLOTHING, EQUIPMENT AND MATERIALS ENGINEERING LABORATORY

Technical Papers (continued)

57. HANSEN, J. V. E. Need to educate DOD policy makers on shortage of R&D capabilities/support in industry as applied to DOD problems; need to anticipate and take action to avoid EPA/OSHA crises in future as relates to military items; SAUDI program; current uniform/clothing item development; QC & DCAS efforts; potential market for sewn and molded KEVLAR. Government Contractors Committee, American Apparel Manufacturers' Association (AAMA), Key Biscayne, FL, 2-3 March 1978.
58. HENRY, M. C., and R. LAIBLE. Logistics/personnel support/chemical-biological defense/chemical agent offense. Materials Technology Conference, Arlington, VA, 22 February 1978.
59. KANE, F. J. New Army liquid laundry supplies for use in the automatic liquid supply dispensing systems, which conserve energy by using less supplies and natural resources. Soap and Detergent Association, Boca Raton, FL, 25-29 January 1978.
60. Modification of NARADCOM pesticide specifications to conform with the regulations of the Environmental Protection Agency (EPA) concerning proper labeling information specifying applicable insects to be controlled, and disposal of pesticide containers. Armed Forces Pest Control Board Technical Meeting, Defense General Supply Center, Richmond, VA, 7-8 February 1978.
61. KIRKWOOD, B. Comfort and durability of Army fabrics. Cornell University, Ithaca, NY, April 1978.
62. LASTNIK, A. L. NARADCOM's responsibilities and capabilities with regard to protective clothing for firefighters. FY78 Headquarters, TRADOC Conference, Virginia Beach, VA, 3-7 October 1977.
63. LOPATIN, G. Melt spinning of hollow fibers. American Institute of Chemical Engineers, Atlanta, GA, 1 March 1978.

CLOTHING, EQUIPMENT AND MATERIALS ENGINEERING LABORATORY

Technical Papers (continued)

64. RAMSLEY, A. O. NARADCOM camouflage program. DARCOM Countermeasures/Counter-Countermeasures (CM/CCM) Working Group, Harry Diamond Laboratories, Washington, DC, 29 March 1978.

Other Publications

65. MACNAIR, R. N., and G. N. ARONS. Sorptive textile systems containing activated carbon fibers. In Carbon Adsorption Handbook. P. N. Cheremisinoff and F. Ellerbusch (eds). Ann Arbor Science Publishers, Ann Arbor, MI, 1978, pp. 819-859.

Patents

66. DEVARAKONDA, V., and J. L. KOVAR. Slide fastener endurance tester. US Patent No. 4,102,180, 25 July 1978.

67. GREENDALE, J. H. Adjustable helmet suspension system. US Patent No. 4,056,852, 8 November 1977.

68. LAIBLE, R. C., and A. BRYNJOLFSSON. Packing for cryogenic seal joint, US Patent No. 4,099,726, 11 July 1978.

FOOD ENGINEERING LABORATORY

Technical Reports

69. BRYNJOLFSSON, A. Energy and food irradiation. NATICK/TR-78/032, (FEL-79), August 1978.
70. The high dose and the low dose food irradiation program in the United States. NATICK/TR-78/033, (FEL-78), August 1978.
71. COHEN, J. S., and V. C. MASON. Radappertization (radiation sterilization) of foods. Bibliography of technical publications and papers. NATICK/TR-77/009, (FEL-62), December 1976.
72. DARSCH, G., C. SHAW, and J. TUOMY. Storage study of frozen entree items developed for Walter Reed Army Medical Center. NATICK/TR-78/006, (FEL-73), April 1978.
73. HOET, P. J. Waste disposal unit; design, fabrication and test. York Industries, Inc., Emigsville, PA, Contract No. DAAK03-74-C-0106. NATICK/TR-78/005, (FEL-69), February 1976 (AD A051 507).
74. HU, K. H., R. A. LAMPI, J. P. NIBI, and E. R. LORD. Survey of energy utilization and conservation efforts at military dining facilities. NATICK/TR-78/023, (FEL-75), April 1978.
75. JOSEPHSON, E. S., F. HEILIGMAN, C. K. WADSWORTH, J. J. HOWKER, and E. WIERBICKI. Low dose food irradiation at Natick. NATICK/TR-78/003, (FEL-65), June 1977 (AD A046 622).
76. KLOSE, A. A., W. E. TOWNSEND, and G. C. WALKER. Identification of components or fractions associated with adverse changes in freeze dried chicken and pork during storage. R. B. Russell Agricultural Research Center, US Dept. of Agriculture, Contract No. STSNL 75-113, NATICK/TR-78/007, (FEL-70), June 1978.
77. LOVERIDGE, V. A., G. C. WALKER, and J. M. TUOMY. Effect of freezing rate and method of rethermalization on the organoleptic qualities of eleven meat entrees. NATICK/TR-78/024, (FEL-76), June 1978.

FOOD ENGINEERING LABORATORY

Technical Reports (continued)

78. SHAW, C. P., and J. L. SECRIST. Edible coatings for individual frozen meat portions. NATICK/TR-77/026, (FEL-67), August 1977 (AD A044 003).
79. _____, and J. L. SECRIST. Textured plant proteins used as extenders: types, processing, properties, nutritional value, acceptability: An annotated bibliography. NATICK/TR-77/025, (FEL-74), April 1978.
80. _____, R. G. YOUNG, G. A. DARSCH, and J. L. SECRIST. Meal, combat, individual, two-year storage study. NATICK/TR-78/026, (FEL-77), June 1978.
81. SWIFT, J., S. F. CONCA, and J. M. TUOMY. Efficiency and cost factors in re-thermalizing frozen foods in typical dining hall equipment. NATICK/TR-78/014, (FEL-72), January 1978.
82. WALLEN, S. E., J. M. TUOMY, and G. C. WALKER. References on compression of freeze-dried foods. NATICK/TR-78/016, (FEL-71), August 1978.
83. WALLNER, S. J., and A. R. RAHMAN. Studies on the development of dehydrated salad vegetables. NATICK/TR-78/028, (FEL-80), August 1978.
84. YOUNG, R., C. SHAW, J. DARSCH, J. TUOMY, and G. WALKER. Meat and fish entree item production guides prepared for Walter Reed Army Medical Center. NATICK/TR-77/005, (FEL-77-004), April 1977 (AD A044 761).

Journal Articles

85. DECAREAU, R. V., and D. P. SMITH. Energy management and process control of food service equipment - summary. Activities Report, 30(1): 120-121 (1978).

FOOD ENGINEERING LABORATORY

Journal Articles (continued)

86. DECARAU, R. V. Food service equipment: Technological trends. *J. Food Protection*, 41(6): 459-463 (1978).
87. _____ Introductory remarks and review of NARADCOM Food Systems Equipment Division studies. *Activities Report*, 30(1): 91-96 (1978).
88. _____ Microbes and microwaves. *Microwave Energy Applications Newsletter*, 9(4): 6-7 (1978).
89. DRAKE, S. R., R. A. KLUTER, and L. C. HINNERGARDT. Textured soy protein improves quality of freeze-dried beef patties. *Food Technol.*, 31(11): 24, 28, 30, 36 (1977).
90. HARRIS, N. E., J. A. RUBINO, and J. W. MCNUTT. Sweetness of fructose in a dry beverage base. *Food Processing Industry*, 47(555): 28-29 (1978).
91. KELCH, W. J., and J. S. LEE. Modeling techniques for estimating fecal coliforms in estuaries. *J. Water Pollution Control Fed.*, 50(5): 862-868 (1978).
92. _____, B. M. COLES, G. E. REYNOLDS, and D. E. BAILEY. Suspected infectious necrotic hepatitis (Black Disease) in Oregon cattle. *J. Amer. Veterinary Med. Assn.*, 171(5): 431-432 (1977).
93. _____, and S. M. RABAUT. Traumatic rupture of the bile duct in a dog. *Veterinary Medicine/Small Animal Clinician*, 73(6): 732-734 (1978).
94. LAMPI, R. A. Flexible packaging for thermoprocessed foods. *Advances in Food Research*, 23: 305-428 (1977).
95. NEBESKY, E. A. Military retort pouch needs. *Activities Report*, 30(1): 26-27 (1978).
96. RAHMAN, A. (Contributer). Microwave/freeze dried compressed foods. *Food Process.*, 39(7): 44-46 (1978).

FOOD ENGINEERING LABORATORY

Journal Articles (continued)

97. RAHMAN, A., and B. LISTER. Foods of the future - summary of session III. Activities Report, 30(1): 88-90 (1978).
98. SCHULZ, G. L. Retort pouch update. Activities Report, 30(1): 28-30 (1978).
99. SHULTS, G. W., J. S. COHEN, J. J. HOWKER, and E. WIERBICKI. Effects of sodium nitrate and sodium nitrite additions and irradiation processing variables on the color and acceptability of corned beef briskets. J. Food Sci., 42(6): 1506-1509 (1977).
100. SMITH, L. W., JR. The resistance to insect penetration of military packaging materials. Activities Report, 30(1): 33-35 (1978).

Technical Papers

101. BRYNJOLFSSON, A., and A. KAPRIELIAN. Biological dosimeter - *Bacillus subtilis*. International Symposium on Food Preservation by Irradiation, IAEA, Wageningen, Netherlands, 21-25 November 1977.
102. Energy and food irradiation. International Symposium on Food Preservation by Irradiation, IAEA, Wageningen, Netherlands, 21-25 November 1977.
103. The high dose and the low dose food irradiation programs in the United States. International Symposium on Food Preservation by Irradiation, IAEA, Wageningen, Netherlands, 21-25 November 1977.
104. Mathematical models for microbial kill by radiation. International Symposium on Food Preservation by Irradiation, IAEA, Wageningen, Netherlands, 21-25 November 1977.

FOOD ENGINEERING LABORATORY

Technical Papers (continued)

105. BRYNJOLFSSON, A., C. P. WANG, and E. MASSOUD. Correction factors in gamma-ray dosimetry. IAEA International and National Standardization of Radiation Dosimetry, Atlanta, GA, 5-9 December 1977.
106. _____, R. JARRETT, and C. P. WANG. Wall effects in gamma-ray dosimetry. IAEA International and National Standardization of Radiation Dosimetry, Atlanta, GA, 5-9 December 1977.
107. _____ Radiation sources in food processing. The FAO/IAEA Interregional Training Course on Food Irradiation, Casaccia, Rome, Italy, 5 June 1978.
108. _____ Cost analysis of food irradiation plants. The FAO/IAEA Interregional Training Course on Food Irradiation, Casaccia, Rome, Italy, 7 June 1978.
109. _____ Agency requirements in food irradiation. The FAO/IAEA Interregional Training Course on Food Irradiation, Casaccia, Rome, Italy, 9 June 1978.
110. _____ International status of the food irradiation program. Serbian Academy of Sciences and Arts, Novi Sad, Yugoslavia, 13 June 1978.
111. _____ Basic effects of irradiation on biological systems. Chemical Society of Yugoslavia, Belgrade, Yugoslavia, 15 June 1978.
112. DECAREAU, R. V. New developments in packaging for microwave directed foods. 38th Annual Meeting, Institute of Food Technologists, Dallas, TX, 4-7 June 1978.
113. _____ Packaging and utensils for domestic microwave ovens - State of the art: Aluminum. Microwave Power Symposium, Ottawa, Canada, 29 June 1978.
114. DRIVER, M. G., A. R. RAHMAN, and D. E. WESTCOTT. Polysaccharides as texture stabilizing additives for dehydrated vegetables. American Chemical Society, Chicago, IL, 28 August-2 September 1977.

FOOD ENGINEERING LABORATORY

Technical Papers (continued)

115. HU, K. H. R&D efforts at NARADCOM concerning energy conservation in military food service operations. 1977 Annual Conference, Society for the Advancement of Food Service Research, New Orleans, LA, 30 September 1977.
116. The emergence of food service industry. Chinese Institute of Engineers, Taiwan, Republic of China, July 1978.
117. Retort pouch. Chinese Institute of Engineers, Taiwan, Republic of China, July 1978.
118. KAMAREI, A. R., M. KAREL, and E. WIERBICKI. The role of ionizing radiation in color changes of radappertized beef. 38th Annual Meeting, Institute of Food Technologists, Dallas, TX, 5-7 June 1978.
119. LAMPI, R. A. Advances in food research and development for military needs. Multi-Unit Architects, Engineers and Construction Officers (MAECO), Chicago, IL, 18-19 May 1978.
120. NEBESKY, E. A., and J. W. SZCZEBLOWSKI. The Army's development of tray-pack foods. American Defense Preparedness Association Meeting, Ft. Huachuca, AZ, 12-14 October 1977.
121. RAHMAN, A. R. Foods of the future. Research and Development Associates for Military Food and Packaging Systems, Inc., US Army Natick Research and Development Command, Natick, MA, 5 October 1977.
122. Dehydration of foods. Department of Food Technology, University of Mosul, Iraq, 17 October 1977.
123. Preservation of fresh produce. Department of Food Technology, University of Mosul, Iraq, 18 October 1977.
124. Freeze drying and compression. Department of Engineering, University of Mosul, Iraq, 19 October 1977.

FOOD ENGINEERING LABORATORY

Technical Papers (continued)

125. RAHMAN, A. R. New advances in food preservation. Department of Food Technology, University of Mosul, Iraq, 20 October 1977.
126. Hydroponic agriculture. Department of Horticulture, University of Mosul, Iraq, 22 October 1977.
127. Food preservation techniques. Department of Food Technology, University of Bagdad, Iraq, 25 October 1977.
128. Dense foods. Department of Food Technology, University of Basra, Iraq, 28 October 1977.
129. Advances in food preservation. Department of Botany, University of Kuwait, Kuwait, 2 November 1977.
130. Hydroponic agriculture. University of Kuwait, Kuwait, 3 November 1977.
131. Compressed foods. Department of Vegetable Crops (KVL-VPT), Royal Institute of Technology, Copenhagen, Denmark, 7 November 1977.
132. Dense foods. SIK (Swedish Food Institute), Goteborg, Sweden, 8 November 1977.
133. Low moisture foods. Center for Professional Advancement, East Brunswick, NJ, 12 December 1977.
134. Hydroponics. Center for Professional Advancement, East Brunswick, NJ, 13 December 1977.
135. Compressed and fabricated foods. Center for Professional Advancement, East Brunswick, NJ, 13 December 1977.
136. Hydroponic agriculture. National 4th Infantry (IVY) Division Association, New England Chapter, US Army Natick Research and Development Command, Natick, MA, 1 April 1978.

FOOD ENGINEERING LABORATORY

Technical Papers (continued)

137. RAHMAN, A. R., N. J. KELLEY, J. A. AYOUB, and D. E. WESTCOTT. Energy saving technique for the production of compressed foods. 38th Annual Meeting, Institute of Food Technologists, Dallas, TX, 4-7 June 1978.
138. _____ Energy saving technique for the production of dense foods. Army Science Conference, West Point, NY, 18-20 June 1978.
139. _____ N. J. KELLEY, J. A. AYOUB, D. E. WESTCOTT, and H. A. HOLLENDER. New technology in the production of freeze dried compressed foods. Fifth International Congress of Food Science and Technology, Kyoto, Japan, 17 September 1978.
140. SCHULZ, G. L. Summary of workshop I: Packaging. Research and Development Associates for Military Food and Packaging Systems, Inc., US Army Natick Research and Development Command, Natick, MA, 6 October 1977.
141. _____ Retortable pouch update, meal, ready-to-eat. Pre-Solicitation Conference, Defense Personnel Supply Center, Philadelphia, PA, 26 October 1977.
142. _____, and H. A. HOLLENDER. Retortable food pouches for military rations. International Association of Milk, Food & Environmental Sanitarians, Kansas City, MO, 16 August 1978.
143. SHIEH, J. J., M. Z. HOFFMAN, M. G. SIMIC, and I. A. TAUB. Radiation-induced oxidation and reduction of bovine myoglobin and its derivatives in aqueous solution. Northeast Regional Meeting, American Chemical Society, Boston, MA, 26-28 June 1978.
144. _____, M. Z. HOFFMAN, and I. A. TAUB. Reduction of metmyoglobin upon irradiation at low temperatures. American Chemical Society, Miami, FL, September 1978.

FOOD ENGINEERING LABORATORY

Technical Papers (continued)

145. SIMIC, M. G., and I. A. TAUB. Fast electron transfer processes in cytochrome-c and related metallo proteins. 1st Biochemical Discussions: Fast Biochemical Reactions in Solutions, Membranes, and Cells, Biophysical Society, Airlie House, VA, 2-5 April 1978.
146. _____ Oxidation kinetics of α -tocopherol by peroxy radicals. Northeast Regional Meeting, American Chemical Society, Boston, MA, 26-28 June 1978.
147. _____, and R. L. ROSENKRANS. Free radical reactions with vitamin B₁₂. Northeast Regional Meeting, American Chemical Society, Boston, MA, 26-28 June 1978.
148. TAUB, I. A., R. A. KAPRIELIAN, and J. W. HALLIDAY. Radiation chemistry of high protein foods irradiated at low temperature. International Symposium on Food Preservation by Irradiation, IAEA, Wageningen, Netherlands, 21-25 November 1977.
149. _____ Radiation chemistry of muscle proteins (myosin and actomyosin) irradiated at -40°C. Interuniversity Reactor Institute, Delft, Netherlands, 28 November 1977.
150. _____, J. W. HALLIDAY, and M. D. SEVILLA. Chemical reactions in proteins irradiated at subfreezing temperatures. American Chemical Society, Anaheim, CA, 12-17 March 1978.
151. _____ Radiation chemistry of myosin and myoglobin. Department of Food Science, Graduate Seminar, University of Massachusetts, Amherst, MA, 13 April 1978.
152. _____, and C. MERRITT. Radiation chemistry at NARADCOM: Position, approaches, plans for using chemical data to support petitions. Coordinated Program on the Radiation Chemistry of Food and Food Components, International Project in the Field of Food Irradiation, Karlsruhe, W. Germany, 20-21 April 1978.

FOOD ENGINEERING LABORATORY

Technical Papers (continued)

153. WESTCOTT, D. E. Dehydration and compression of foods for military feeding. Kansas State University, Manhattan, KS, March 1978.
154. WHITE, V. M. Foods for the military. Harvard University, Cambridge, MA, 28 March 1978.
155. WIERBICKI, E. Food preservation by conventional methods. The FAO/IAEA Interregional Training Course on Food Irradiation, Casaccia, Rome, Italy, 22 May-9 June 1978.
156. Radappertized foods. The FAO/IAEA Interregional Training Course on Food Irradiation, Casaccia, Rome, Italy, 22 May-9 June 1978.
157. Low-dose irradiation of meat and poultry. The FAO/IAEA Interregional Training Course on Food Irradiation, Casaccia, Rome, Italy, 22 May-9 June 1978.
158. Sensory evaluation of irradiated foods. The FAO/IAEA Interregional Training Course on Food Irradiation, Casaccia, Rome, Italy, 22 May-9 June 1978.
159. Irradiation of fish and shellfish. The FAO/IAEA Interregional Training Course on Food Irradiation, Casaccia, Rome, Italy, 22 May-9 June 1978.
160. Packaging for irradiated foods. The FAO/IAEA Interregional Training Course on Food Irradiation, Casaccia, Rome, Italy, 22 May-9 June 1978.
161. , F. HEILIGMAN, V. C. MASON, and R. A. GATES. Reduction of nitrite in prefried bacon preserved by irradiation. 38th Annual Meeting, Institute of Food Technologists, Dallas, TX, 5-7 June 1978.
162. , G. W. SHULTS, V. C. MASON, and R. A. GATES. Reduction of nitrite in corned beef preserved by irradiation. 38th Annual Meeting, Institute of Food Technologists, Dallas, TX, 5-7 June 1978.

FOOD ENGINEERING LABORATORY

Technical Papers (continued)

163. WIERBICKI, E., J. J. HOWKER, J. S. COHEN, V. C. MASON, and J. W. PENSABENE. Reduction of nitrite in ham preserved by irradiation. 38th Annual Meeting, Institute of Food Technologists, Dallas, TX, 5-7 June 1978.

Other Publications

164. BRYNJOLFSSON, A., and A. KAPRIELIAN. Biological dosimeter - *Bacillus subtilis*. Food Preservation by Irradiation, Vol. II, June 1978, pp. 361-372 (IAEA-SM-221/55).

165. _____, and C. P. WANG. Dose limits. Food Irradiation Newsletter, Joint FAO/IAEA Division, Atomic Energy in Food & Agriculture, IAEA, Vienna, Austria, 2(2): 49-56 (1978).

166. _____ Energy and food irradiation. Food Preservation by Irradiation, Vol. II, June 1978, pp. 285-300 (IAEA-SM-221/54).

167. _____ The high dose & the low dose food irradiation programs in the United States. Food Preservation by Irradiation, Vol. I, April 1978, pp. 15-27 (IAEA-SM-221/53).

168. _____ Mathematical models for microbial kill by radiation. Food Preservation by Irradiation, Vol. I, April 1978, pp. 227-239 (IAEA-SM-221/56).

169. DECAREAU, R. V. Microwave energy in food processing. In Encyclopedia of Food Science. M. S. Peterson and A. H. Johnson (eds). Avi Publishing Company, Westport, CT, 1978, pp. 510-513.

170. HARRIS, N. E. Sweeteners, noncarbohydrate (low concentration). In Encyclopedia of Food Science. M. S. Peterson and A. H. Johnson (eds). Avi Publishing Co., Westport, CT, 1978, pp. 718-722.

FOOD ENGINEERING LABORATORY

Other Publications (continued)

171. JOHNSON, K. R. Synergism. In Encyclopedia of Food Science. M. S. Peterson and A. H. Johnson (eds). Avi Publishing Co., Westport, CT, 1978, pp. 722-723.
172. LAMPI, R. A. Packaging of food: design criteria. In Encyclopedia of Food Science. M. S. Peterson and A. H. Johnson (eds). Avi Publishing Co., Westport, CT, 1978, pp. 591-597.
173. MACDONALD, B. A., C. W. REES, and J. A. CASPERSEN. Radiation sterilization of food. In Encyclopedia of Food Science. M. S. Peterson and A. H. Johnson (eds). Avi Publishing Co., Westport, CT, 1978, pp. 654-658.
174. MEHRLICH, F. P. Bromelains. In Encyclopedia of Food Science. M. S. Peterson and A. H. Johnson (eds). Avi Publishing Co., Westport, CT, 1978, pp. 94-97.
175. NII, I. Off-flavors, In Encyclopedia of Food Science. M. S. Peterson and A. H. Johnson (eds). Avi Publishing Co., Westport, CT, 1978, pp. 575-577.
176. RAHMAN, A. R. Hydroponic agriculture. In Encyclopedia of Food Science. M. S. Peterson and A. H. Johnson (eds). Avi Publishing Co., Westport, CT, 1978, pp. 400-402.
177. SECRIST, J. L. Restructured meats. In McGraw-Hill Yearbook of Science & Technology 1977. McGraw-Hill, NY, 1978, pp. 177-178.
178. TAUB, I. A., R. A. KAPRIELIAN, and J. W. HALLIDAY. Radiation chemistry of high protein foods irradiated at low temperature. Food Preservation by Irradiation, Vol. I, April 1978, pp. 371-384 (IAEA-SM-221/59).
179. WANG, C., and A. BRYNJOLFSSON. Determination of specific heat of meat. American Society of Mechanical Engineers, 78-WA/HT-57, September 1978.

FOOD ENGINEERING LABORATORY

Other Publications (continued)

180. WANG, C., and A. BRYNJOLFSSON. Heat transfer and the killing of bacteria in thermal sterilization of meat roll. American Society of Mechanical Engineers, 78-WA/HT-50, September 1978.
181. WESTCOTT, D. E. Krebs cycle. In Encyclopedia of Food Science. M. S. Peterson and A. H. Johnson (eds). Avi Publishing Co., Westport, CT, 1978, pp. 441-442.

Patents

182. BERNAZZANI, R. J. Field range cabinet with removable outer shell. US Patent No. 4,092,973, 6 June 1978.
183. GLICKSTEIN, M., J. M. TUOMY, and M. J. SHWERT. Freeze-dried mix for spoonable salad dressing and method therefor. US Patent No. 4,107,335, 15 August 1978.
184. GORFIEN, H., A. R. RAHMAN, and D. E. WESTCOTT. Method of producing crisp reheated French fried potatoes. US Patent No. 4,109,020, 22 August 1978.
- LAIBLE, R. C., and A. BRYNJOLFSSON. See entry no. 68.
185. RAHMAN, A. R. Method of compacting freeze-dried particulate foods. US Patent No. 4,096,283, 20 June 1978.
186. _____, and W. DENEKE. Process of making dehydrated fruit juice. US Patent No. 4,104,414, 1 August 1978.
187. _____, and S. G. HARALAMPU. Process for producing compacted, dehydrated uncooked cabbage and cabbage product thereof. US Patent No. 4,109,026, 22 August 1978.

FOOD SCIENCES LABORATORY

Technical Reports

188. BALL, D. H., and E. WETZEL. Liquid chromatographic analysis of the free sugars in sweet corn: A method indicative of maturity and of quality changes related to processing techniques. NATICK/TR-78/008, July 1977 (AD A052 688).
189. BISSETT, F. H., and L. A. LEVASSEUR. Chemical conversion of nitrocellulose for fertilizer. NATICK/TR-77/027, September 1976 (AD A046 362).
190. JONES, R. H., and W. D. LANGMACK. Biological pilot plant study at Radford Army Ammunition Plant. Jones, Olsen and Associates, Inc., Contract No. DAAG-17-76-C-0050. NATICK/TR-77/002, October 1976 (AD A048 549).
191. LARKIN, E. P. Thermal inactivation of viruses. Food and Drug Administration, Contract No. DRXNM-77-115. NATICK/TR-78/002, October 1977 (AD A048 068).
192. MAXCY, R. B., D. B. ROWLEY, and A. ANELLIS. Radiation and heat resistance of *moraxella-acinetobacter* in meats. NATICK/TR-78/010, January 1978.
193. SPANO, L. A., T. H. TASSINARI, C. F. MACY, and E. D. BLACK. Pretreatments and substrate evaluation for the enzymatic hydrolysis of cellulosic wastes. EPA-600/7-77-038, July 1977.
194. Twenty-sixth conference on microbiological deterioration of material 15, 16 and 17 Nov 77. NATICK/TR-78/029, July 1978.*
195. WALSH, J. T. Chemical characterisation of nitroglycerin biodegradation products. NATICK/TR-76-51, September 1977.
196. WILKINSON, W. C., L. E. SYMINGTON, J. R. SIEBOLD, H. L. MEISELMAN, and D. L. MAAS. Consumer and worker opinions of cash food systems: NAS ALAMEDA. NATICK/TR-77/023, August 1977 (AD A044 240).

FOOD SCIENCES LABORATORY

Journal Articles

197. ALLEN, A. L. Economic evaluation of the enzymatic conversion of waste cellulose to glucose. *Biochemical Engineering*, AIChE Symposium Series, 72(158): 115-118 (1976).
198. ANELLIS, A., and D. BERKOWITZ. Comparative dose-survival curves of representative Clostridium botulinum type F spores with type A and B spores. *Appl. Environ. Microbiol.*, 34(5): 600-601 (1977).
199. ANELLIS, A., E. SHATTUCK, M. MORIN, B. SRISARA, S. QVALE, D. B. ROWLEY, and E. W. ROSS, JR. Cryogenic gamma irradiation of prototype pork and chicken and antagonistic effect between Clostridium botulinum types A and B. *Appl. Environ. Microbiol.*, 34(6): 823-831 (1977).
200. BEAUCHAMP, G. K., O. MALLER, and J. G. ROGERS, JR. Flavor preferences in cats (Felis catus and panthera sp.). *J. Comp. Physiol. Psychol.*, 91(5): 1118-1127 (1977).
201. BISHOV, S. J., Y. MASUOKA, and J. G. KAPSALIS. Antioxidant effect of spices, herbs and protein hydrolyzates in freeze-dried model systems: Synergistic action with synthetic phenolic antioxidants. *Food Process. Preserv.*, 1(2): 153-166 (1977).
202. BISSETT, F., and D. STERNBERG. Immobilization of aspergillus betaglucosidase on chitosan. *Appl. Environ. Microbiol.*, 35(4): 750-755 (1978).
203. CARPENTER, D. F., N. G. MCCORMICK, J. H. CORNELL, and A. M. KAPLAN. Microbial transformation of ¹⁴C-labeled 2,4,6-trinitrotoluene in an activated-sludge system. *Appl. Environ. Microbiol.*, 35(5): 949-954 (1978).
204. DRAKE, S. R., R. A. KLUTER, and L. C. HINNERNARDT. Textured soy protein improves quality of freeze-dried beef patties. *Food Technol.*, 31(11): 24-30, 36 (1977).
205. HIRSCH, E., C. DUBOSE, and H. L. JACOBS. Dietary control of food intake in cats. *Physiol. & Behav.*, 20:(3): 287-295 (1978).

FOOD SCIENCES LABORATORY

Journal Articles (continued)

206. JACOBS, H. L. National ferment in dietary goals: Challenge and opportunity for the Defense Department's food program. Activities Report, 30(1): 69-85 (1978).
207. MALLER, O., and A. CARDELLO. The sick senses: functions of taste and smell. Professional Nutritionist, 10: 1-5 (1978).
208. _____, and S. A. MILLER. Workshop on recommended dietary goals and the Armed Forces: Introduction. Activities Report, 30(1): 46 (1978).
209. _____, and B. EDELMAN. Your weight: How do you manage it? Soldiers, 32(9): 9-12 (1977).
210. MANDELS, M., and R. E. ANDREOTTI. Problems and challenges in the cellulose to cellulase fermentation. Process Biochem., 13(5): 6-13 (1978).
211. MCCORMICK, N. G., J. H. CORNELL, and A. M. KAPLAN. Identification of biotransformation products from 2,4-dinitrotoluene. Appl Environ. Microbiol., 35(5): 945-948 (1978).
212. MEIDANI, J., W. W. NAWAR, C. MERRITT, JR., and M. L. BAZINET. Evidence for the mechanisms of formation of radiolysis products using a deutero labeled triglyceride. J. Amer. Oil Chem. Soc., 54(11): 502-505 (1977).
213. _____, W. W. NAWAR, W. G. YEOMANS, and C. MERRITT, JR. The identification of radiolytic decomposition product from tributyrin. J. Amer. Oil Chem. Soc., 54(11): 496-501 (1977).
214. MEISELMAN, H. L., and H. E. BOSE. Effects of flow rate on taste intensity ratings. Chemical Senses and Flavor, 2(4): 515-522 (1977).
215. _____ Recommended US dietary goals and the Armed Forces - Part III. Activities Report, 30(1): 67-68 (1978).

FOOD SCIENCES LABORATORY

Journal Articles (continued)

216. MERRITT, C., JR., P. ANGELINI, and R. A. GRAHAM. Effect of radiation parameters on the formation of radiolysis products in meat and meat substances. *J. Agric. Food Chem.*, 26(1): 29-35 (1978).

217. _____, D. H. ROBERTSON, and R. A. GRAHAM. Elucidation of functional groups by means of selected binary encoded spectra. *Advances in Mass Spectrometry*, 7B: 1002-1012 (1978).

218. _____ Symposium on current studies on the chemistry of food irradiation. *J. Agric. Food Chem.*, 26(1): 1-2 (1978).

219. MOSKOWITZ, H. R., and L. KARMAN. Food compatibilities and menu planning. *J. Inst. Can. Sci. Technol. Aliment.*, 10(4): 257-264 (1977).

220. NARAYAN, K. A., J. J. MCMULLEN, T. WAKEFIELD, and W. K. CALHOUN. Influence of dietary glycerol on the serum lipoproteins of rats fed a fat-free diet. *J. Nutrition*, 107(12): 2153-2163 (1977).

221. NYSTROM, J. M., R. K. ANDREN, and A. L. ALLEN. Enzymatic hydrolysis of cellulosic waste: The status of the process technology and an economic assessment. *Amer. Inst. Chem. Eng. Symp. Series*, 74(172): 82-88 (1978).

222. PORTER, W. L., A. S. HENICK, F. MURPHY, R. COLGAN, and G. PORFERT. Autoxidation and effects of pro- and anti-oxidants in lyophilized red blood cell membranes. *Lipids*, 13(2): 137-146 (1978).

223. _____, L. A. LEVASSEUR, and A. S. HENICK. Evaluation of some natural and synthetic phenolic antioxidants in linoleic acid monolayers on silica. *J. Food Sci.*, 42(6): 1533-1535 (1977).

224. POWERS, E. M., and T. G. LATT. Simplified 48-hour IMViC test: An agar plate method. *Appl. and Environ. Microbiol.*, 34(3): 274-279 (1977).

FOOD SCIENCES LABORATORY

Journal Articles (continued)

225. RICHMOND, R. C., and M. G. SIMIC. Effect of radiation on *cis*-dichlorodiammine platinum (II) and DNA in aqueous solution. *British Journal of Cancer*, 37(Suppl. III): 20-23 (1978).
226. SEGARS, R. A., R. G. HAMEL, and J. G. KAPSALIS. Use of Poisson's ratio for objective-subjective texture correlations in beef. An apparatus for obtaining the required data. *J. Texture Studies*, 8: 433-447 (1977).
227. SPANO, L. A. Enzymatic hydrolysis of cellulosic wastes to fermentable sugars and the products of alcohol. *J. Coatings Technol.*, 50(637): 71-78 (1978).
228. STUTZ, H. K., G. J. SILVERMAN, W. M. SPIRA, and R. E. LEVIN. An apparatus for collecting volatiles and maintaining a constant oxygen concentration. *J. Food Sci.*, 43(2): 658-659 (1978).
229. TASSINARI, T., and C. MACY. Differential speed two roll pretreatment of cellulosic materials for enzymatic hydrolysis. *Biotech. and Bioeng.*, 19(9): 1321-1330 (1977).
230. ZARKARIAN, J. A., and C. MERRITT, JR. Identification of gas chromatographic effluents through the effect of temperature on the slope of a log retention volume-carbon number plot. *J. Chromat. Sci.*, 16: 303-305 (1978).

Technical Papers

231. COBEAN, N. J. The analysis of response data in Army mess hall food preference. *Fifth International Symposium on Multivariate Analysis*, Pittsburgh, PA, June 1978.
232. EL-ZAWAHRY, Y. A., and D. B. ROWLEY. Effect of certain factors on the radiation resistance and recovery of *Yersinia enterocolitica*. *78th Annual Meeting, American Society for Microbiology*, Las Vegas, NV, 14-19 May 1978.
233. FEEHERRY, F. E., and H. S. LEVINSON. Heat activation of *Clostridium perfringens* spores, NCTC 8238 and 8798. *Seventh International Spore Conference*, Madison, WI, 6 October 1977.

FOOD SCIENCES LABORATORY

Technical Papers (continued)

234. GALLO, B. J. A regulatory mutant of Trichoderma reesei. Northeast Regional Meeting, American Society for Microbiology, Saratoga Springs, NY, 21 October 1977.

235. Cellulase production by a new mutant strain of Trichoderma reesei MCG 77. Symposium on Biotechnology in Energy Production and Conservation, Gatlinburg, TN, May 1978.

236. Cellulase from Neurospore crassa: a comparison. 78th Annual Meeting, American Society for Microbiology, Las Vegas, NV, 17 May 1978.

237. MCG 77 - regulatory mutant of cellulase synthesis. Third International Symposium on Genetics of Industrial Microorganisms, University of Wisconsin, Madison, WI, 4-9 June 1978.

238. GARBER, E. B., AND L. COX. Water activity: a predictive tool. Northeast Regional Meeting, American Chemical Society, Simmons College, Boston, MA, 27 June 1978.

239. JACOBS, H. L. Behavioral sciences analysis of DoD food service: Is consumer acceptance enough? U.S. Air Force Academy, Colorado Springs, CO, 20-22 April 1978.

240. KAPLAN, A. M. Biotransformation of pollutants: Factors affecting extrapolation from the laboratory to natural environments. EPA Workshop, Gulf Breeze, FL, 9-14 April 1978.

241. KAPSALIS, J. G., and H. R. MOSKOWITZ. Interrelationship between instrumental methods and sensory assessment for food texture. Second International Symposium on Properties of Water in Relation to Food Quality and Stability, Osaka, Japan, 10-16 September 1978.

242. Moisture sorption hysteresis. Second International Symposium on Properties of Water in Relation to Food Quality and Stability, Osaka, Japan, 10-16 September 1978.

FOOD SCIENCES LABORATORY

Technical Papers (continued)

243. KAPSALIS, J. G., and H. R. MOSKOWITZ. Interrelationship between instrumental method and sensory assessment for food texture. Fifth International Congress of Food Science and Technology, Kyoto, Japan, 17-22 September 1978.

244. Moisture sorption hysteresis. Fifth International Congress of Food Science and Technology, Kyoto, Japan, 17-22 September 1978.

245. LEVINSON, H. S. Applied microbiology of spore forming bacteria. Seventh International Spore Conference, Madison, WI, 6 October 1977.

246. Heat activation of Clostridium perfringens spores. Southeast Branch, American Society for Microbiology, Barry College, Miami, FL, 4 March 1978.

247. Transition of Bacillus spores from dormancy to active metabolism. Department of Microbiology, University of Miami School of Medicine, Miami, FL, 6 March 1978.

248. MANDELS, M. Enzymatic saccharification of waste cellulose; a microbial solution to waste problem. Department of Chemistry, Simmons College, Boston, MA, 21 November 1977.

249. Saccharification of cellulose with Trichoderma cellulase. Rensselaer Polytechnic Institute, Troy, NY, 21 June 1978.

250. Enzymatic degradation of cellulose and its application. Tenth Research Conference on Cellulose and Related Compounds, Foundation for Research Conferences in Chemistry, Otsu, Japan, 4 July 1978.

251. Production and applications of Trichoderma cellulase. National Food Research Institute, Tokyo, Japan, 11 July 1978.

252. Enzymatic degradation of cellulose and its application. Society for Polymer Science, Tokyo, Japan, 12 July 1978.

FOOD SCIENCES LABORATORY

Technical Papers (continued)

253. MAXCY, R. B., and D. B. ROWLEY. Radiation-resistant vegetative bacteria in a proposed system of radappertization of meats. IAEA/FAO International Symposium on Food Preservation by Irradiation, Wageningen, Netherlands, 21-25 May 1977.
254. MERRITT, C., JR., P. ANGELINI, and W. W. NAWAR. Chemical analysis of radiolysis products relating to the wholesomeness of irradiated food. International Atomic Energy Agency and Food Agricultural Organization, Wageningen, Netherland, 21-25 November 1977.
255. NARAYAN, K. A., and J. J. McMULLEN. The interactive effect of dietary glycerol and corn oil on rat liver lipids and tissue lipoproteins. Federation of American Societies of Experimental Biologists, Atlantic City, NJ, 9-14 April 1978.
256. POWERS, E. M. Rapid detection and identification of stressed fecal coliforms. 78th Annual Meeting, American Society for Microbiology, Las Vegas, NV, 14-19 May 1978.
257. REESE, E. T., and M. MANDELS (Co-chairmen). Symposium on Biology of Trichoderma. Second International Mycological Congress, Tampa, FL, 30 August 1977.
258. Production of microbial enzymes for cellulose hydrolysis. Third Enzyme Conference, US:USSR Technical Exchange, Tallin, Latvia, November 1977.
259. RICHMOND, R. C., and M. SIMIC. Mechanisms of radiation sensitization by cis-dichlorodiammine platinum(II): radiation chemistry in aqueous solution in the presence and absence of DNA. Eighth L.H. Gray Memorial Conference, Cambridge, England, 5-9 September 1977.
260. Radiation-induced thymine base residue release from DNA modified by t-butanol and cis-dichlorodiammineplatinum(II): a mechanistic study. Twenty-sixth Annual Meeting, Radiation Research Society, Toronto, Canada, 14-18 May 1978.

FOOD SCIENCES LABORATORY

Technical Papers (continued)

261. ROGERS, M., and A. M. KAPLAN. Virucidal capacity for a chlorophenolic disinfectant. Annual Meeting, Society for Industrial Microbiology, Rice University, Houston, TX, 13-18 August 1978.
262. ROWLEY, D. B. Microbiological safety of radappertized meats. Interagency Botulism Research, Coordinating Committee, Brigham City, UT, 19 October 1977.
263. _____ Food preservation by irradiation. Brigham Young University, Provo, UT, 20 October 1977.
264. _____ Food irradiation. Baxter Travenol Laboratories, Inc., Morton Grove, IL, 8 November 1977.
265. _____, and P. J. VANDEMARK. Rapid detection on stressed fecal coliforms by radiometric and impedance techniques. 78th Annual Meeting, American Society for Microbiology, Las Vegas, NV, 14-19 May 1978.
266. SEGARS, R. A., R. G. HAMEL, and J. G. KAPSALIS. Use of Poisson's ratio for objective-subjective texture correlations in beef. 47th Annual Meeting, Society of Rheology, New York, NY, 27 February-2 March 1977.
267. _____, R. E. BOARTFIELD, J. G. KAPSALIS, and R. A. KLUTER. Use of simple punch and die tests to predict the tenderness of ground beef. 48th Annual Meeting, Society of Rheology, Madison, WI, 23-27 October 1977.
268. SILVERMAN, G. Microbial contamination of food. Department of Nutrition, Harvard School of Public Health, Boston, MA, 7 December 1977.
269. _____ Impact of microbiology and other factors on quality and acceptability in military feeding systems. University of Rhode Island, Kingston, RI, 28 February 1978.

FOOD SCIENCES LABORATORY

Technical Papers (continued)

270. SILVERMAN, G. Cultural factors which influence production of staphylococcus enterotoxins. Brigham Young University, Provo, UT, 16 March 1978.

271. _____ Establishing and maintaining microbiological standards in food service systems. Food Service Systems '78: System Design and Management, Los Angeles, CA, 18-20 April 1978.

272. SPANO, L. A. Economics of enzymatic hydrolysis of cellulose for the production of ethanol. Second Annual Symposium on Fuels from Biomass, Troy, NY, 19-23 June 1978.

273. _____ Enzymatic hydrolysis of cellulosic materials in urban wastes for the production of ethanol. Engineering Foundation Conference, Franklin Pierce College, Rindge, NH, 18-21 July 1978.

274. SPROUL, O. J., L. H. BOWMAN, III, M. R. ROGERS, and A. M. KAPLAN. Virucidal capacity of a chlorophenolic disinfectant. Society for Industrial Microbiology, Houston, TX, 13-18 August 1978.

275. TASSINARI, T. H. A proposed process for the production of fermentable sugars from furfural manufacturing residues. Department of Energy, Fuels from Biomass Fermentation, University of California, Berkley, CA, 4-6 January 1978.

276. WERNER, J. Enterotoxin secretion by Staphylococcus aureus grown on gel surfaces. 78th Annual Meeting, American Society for Microbiology, Las Vegas, NV, 14-19 May 1978.

277. ZIMBRICK, J. D., A. SUKROCHANA, and R. C. RICHMOND. Studies on radiosensitization of E. coli cells by antitumor *cis* Pt(II) complexes. Twenty-sixth Annual Meeting, Radiation Research Society, Toronto, Canada, 14-18 May 1978.

FOOD SCIENCES LABORATORY

Other Publications

278. ANDREN, R. K. Aspects of enzymatic saccarification of cellulose at the pilot plant level. In Bioconversion of Cellulosic Substances into Energy, Chemicals and Microbial Protein. T. K. Ghose (ed). Indian Institute of Technology, New Delhi, India, 1977, pp. 397-412.
279. ANELLIS, A., E. SHATTUCK, T. LATT, S. SONGPASERTCHAI, D. B. ROWLEY, and E. ROSS, JR. Gamma irradiation at $-30^{\circ} \pm 10^{\circ}\text{C}$ of low level nitrite/nitrate ham. In Spore Research 1976 Vol II. A. N. Barker, J. Wolf, D. J. Ellar, G. J. Dring, and G. W. Gould (eds). Academic Press, London, 1977, pp. 631-647.
280. BISHOV, S. J., and A. S. HENICK. Natural antioxidants. In Encyclopedia of Food Science. M. S. Peterson and A. H. Johnson (eds). Avi Publishing Co., Westport, CT, 1978, pp. 536-539.
281. CALHOUN, W. K. Bioassay. In Encyclopedia of Food Science. M. S. Peterson and A. H. Johnson (eds). Avi Publishing Co., Westport, CT, 1978, pp. 61-62.
282. DESOR, J., O. MALLER, and L. GREENE. Preference for sweets in humans: Infants, children and adults. In Taste and Development: The Genesis of Sweet Preference. J. M. Weiffenbach (ed). DHEW Publication No (NIH)77-1068, US Govt Print Ofc, Washington, DC, 1977, pp. 161-172.
283. DUBOSE, C. N., H. R. MOSKOWITZ, and M. J. REUBEN. Flavor chemical mixtures. A psychophysical analysis. In Flavor Quality: Objective Measurement. R. A. Scanlan (ed). American Chemical Society Symposium Series 51: Washington, DC, 1977, pp. 29-44.
284. GRAEBER, R. C., W. LUBANOVIC, M. THOMPSON, E. HALBERG, F. HALBERG, and H. LEVINE. Circadian rhythm of performance on a reciprocal tapping task in subjects on a limited free-choice diet. The XII International Conference Proceedings of the International Society of Chronobiology. Publishing House Il Ponte, Milan, 1977, pp. 39-46.

FOOD SCIENCES LABORATORY

Other Publications (continued)

285. HENICK, A. S. Glycerides. In Encyclopedia of Food Science. M. S. Peterson and A. H. Johnson (eds). Avi Publishing Co., Westport, CT, pp. 352-354.
286. Rancidity. In Encyclopedia of Food Science. M. S. Peterson and A. H. Johnson (eds). Avi Publishing Co., Westport, CT, pp. 658-659.
287. JACOBS, H. L., E. R. SMUTZ, and C. N. DUBOSE. Comparative observations on the ontogeny of taste preference. In Taste and Development: The Genesis of Sweet Preference. J. M. Weiffenbach (ed). DHEW Publication No. (NIH) 77-1068, US Govt Print Ofc, Washington, DC, 1977, pp. 99-107.
288. KAPSALIS, J. G. Water vapor pressure of foods. In Encyclopedia of Food Science. M. S. Peterson and A. H. Johnson (eds). Avi Publishing Co., Westport, CT, 1978, pp. 863-870.
289. KARE, M. R., and O. MALLER. The chemical senses and nutrition. Academic Press, New York, 1977.
290. LEVINE, H. E., F. HALBERG, M. THOMPSON, R. C. GRAEBER, D. THOMPSON, and H. JACOBS. Changes in internal timing of heart rate, diastolic blood pressure, and certain aspects of physical and mental performance in presumably healthy subjects on different meal schedules. The XII International Conference Proceedings of the International Society of Chronobiology. Publishing House Il Ponte, Milan, 1977, p. 139-148.
291. , F. HALBERG, F. C. BARTTER, C. DELEA, R. C. GRAEBER, and H. JACOBS. Circadian rhythm in oral temperature on different schedules of drugs and meals, with reference to primary aldosteronism. In Drugs, Biogenic Amines and Body Temperature. K. E. Cooper, P. Lomax, E. Schonbaum (eds). Karger, Basel, 1977, pp. 235-241.
292. LEVINSON, H. S., F. E. FEEHERRY, and G. R. MANDELS. Bases for applications of bacterial and fungal spores. In Spores VII. G. Chambliss and J. C. Vary (eds). American Society for Microbiology, Washington, DC, 1978, pp. 3-17.

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Other Publications (continued)

293. LEVINSON, H. S., and F. E. FEEHERRY. Kinetics of heat activation of spores of Clostridium perfringens. In Spores VII. G. Chambliss and J. C. Vary (eds). Washington, DC, 1978, pp. 34-40.

294. MALLER, O. Appetite, hunger and satiety. In Encyclopedia of Food Science. M. S. Peterson and A. H. Johnson (eds). Avi Publishing Co., Westport, CT, 1978, pp. 45-47.

295. MANDELS, M., R. E. ANDREOTTI, and C. ROCHE. Effect of some fermentation variables on growth and enzyme production by Trichoderma. In Bioconversion of Cellulosic Substances into Chemicals, Energy and Microbial Protein. T. K. Ghose (ed). Indian Institute of Technology, New Delhi, India, 1977, pp. 249-267.

296. _____, and E. T. REESE. Enzymatic degradation of cellulose and its applications. In Tenth Research Conference on Cellulose and Related Compounds, Foundation for Research Conferences in Chemistry, Osaka, Japan, 1978, pp. 22-23.

297. MEISELMAN, H. L. The role of sweetness in the food preference of young adults. In Taste and Development. The Genesis of Sweet Preference. J. M. Weiffenbach (ed). DHEW Publication No. (NIH) 77-1068, US Govt Print Ofc, Washington, DC, 1977, pp. 269-281.

298. _____ Scaling: Part 1. Scales for measuring food preference. In Encyclopedia of Food Science. M. S. Peterson and A. H. Johnson (eds). Avi Publishing Co., Westport, CT, 1978, pp. 675-678.

299. _____ Taste psychology. In Encyclopedia of Food Science. M. S. Peterson and A. H. Johnson (eds). Avi Publishing Co., Westport, CT, 1978, pp. 737-740.

300. NARAYAN, K. A. Low fat, low-cholesterol diets. In Encyclopedia of Food Science. M. S. Peterson and A. H. Johnson (eds). Avi Publishing Co., Westport, CT, 1978, pp. 472-480.

FOOD SCIENCES LABORATORY

Other Publications (continued)

301. NYSTROM, J. M., and P. H. DILUCA. Enhanced production of Trichoderma cellulase on high levels of cellulose in submerged culture. In Bioconversion of Cellulosic Substances into Energy, Chemicals and Microbial Protein. T. K. Ghose (ed). Indian Institute of Technology, New Delhi, 1977, pp. 293-304.
302. PEITERSEN, N. Transient response of Trichoderma viride growing on cellulose in continuous flow culture. In Bioconversion of Cellulosic Substances into Chemicals, Energy and Microbial Protein. T. K. Ghose, (ed). Indian Institute of Technology, New Delhi, India, 1977, pp. 21-23.
303. ROTH, L. M., and D. W. ALSOP. Toxins of blattaria. In Arthropod Venoms (Handbook of Experimental Pharmacology, new series V.48). S. Bertini (ed). Springer, 1978, pp. 465-487.
304. ROWLEY, D. B., R. S. SULLIVAN, and E. S. JOSEPHSON. Indicators of viruses in foods preserved by ionizing radiation. In Indicators of Viruses in Water and Food. G. Berg (ed), Ann Arbor Science Publishers, 1978, pp. 355-382.
305. Microbiology: Part 2. Microbiological aspects of food preservation by ionizing radiation. In Encyclopedia of Food Science. M. S. Peterson and A. H. Johnson (eds). Avi Publishing Co., Westport, CT, 1978, pp. 495-497.
306. RYU, D., and M. MANDELS. Cellulase biosynthesis and cellulose. In Tenth Research Conference on Cellulose and Related Compounds, Foundation for Research Conferences in Chemistry, Osaka, Japan, 1978, pp. 25-26.
307. SILVERMAN, G. Microbiology: Part 1. Research areas in the field of food microbiology. In Encyclopedia of Food Science. M. S. Paterson and A. H. Johnson (eds). Avi Publishing Co., Westport, CT, 1978, p. 495.

FOOD SCIENCES LABORATORY

Other Publications (continued)

308. SILVERMAN, G. Needed research in the food sciences: Part 4. Food microbiology. In Encyclopedia of Food Science. M. S. Peterson and A. H. Johnson (eds). Avi Publishing Co., Westport, CT, 1978, pp. 544-545.

309. _____ Staphylococci. In Encyclopedia of Food Science. M. S. Peterson and A. H. Johnson (eds). Avi Publishing Co., Westport, CT, 1978, pp. 706-707.

310. _____, and A. J. SINSKEY. Sterilization by ionizing irradiation. In Disinfection, Sterilization and Preservation. S. Block (ed). Lea and Febiger, 1978, pp. 542-561.

311. SYMINGTON, L. E., E. S. STEIN, and W. R. SULLINS. Effects of isolation on food habits. In Proceedings of the 21st Annual Meeting. Human Factors Society, Santa Monica, CA, 1977, pp. 440-442.

312. THOMAS, M. H. Microbiological assays. In Encyclopedia of Food Science. M. S. Peterson and A. H. Johnson (eds). Avi Publishing Co., Westport, CT, 1978, pp. 489-494.

Patents

313. BISHOV, S. J. Method of stabilizing foods with an antioxidant. US Patent No. 4,110,483, 29 August 1978.

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